In the Claims:

Please amend the claims as follows:

1. (Currently Amended) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

a first optics for directing said excitation light to said sample receiving platform;

an ultraviolet light detector for receiving induced fluorescent energy; ~~and~~

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and

a camera platform.

2. (Cancelled).

3. (Previously Cancelled).

4. (Previously Presented) The ultraviolet fluorescence detector of claim 1, wherein said first optics includes at least one of an optical lens, a shutter, a filter, a mirror, a fiber optic coupler and an optical fiber.

5. (Original) The ultraviolet fluorescence detector of claim 4, wherein said filter is a filter wheel.

6. (Original) The ultraviolet fluorescence detector of claim 1, further comprising an input optic for passing the induced fluorescent energy to said ultraviolet light detector.

7. (Original) The ultraviolet fluorescence detector of claim 6, wherein the input optic is an F/2 lens having a diameter over approximately 1.0 meters.

8. (Previously Presented) The ultraviolet fluorescence detector of claim 6, further comprising a second optic for receiving said induced fluorescent energy.

9. (Original) The ultraviolet fluorescence detector of claim 8, wherein said second optic includes at least one of a mirror, a lens, a beam splitter, a shutter, a fiber optic fiber, a fiber optic coupler, a filter and an input slit.

10. (Previously Presented) The ultraviolet fluorescence detector of claim 9, wherein said filter is a filter wheel.

11. (Original) The ultraviolet fluorescence detector of claim 1, wherein said ultraviolet light detector includes a spectrograph.

12. (Original) The ultraviolet fluorescence detector of claim 1, further comprising a CCD detector.

13. (Original) The ultraviolet fluorescence detector of claim 10, wherein said CCD detector is cooled.

14. (Original) The ultraviolet fluorescence detector of claim 1, wherein said analysis module includes a computer.

15. (Original) The ultraviolet fluorescence detector of claim 1, further comprising a signal processor.

16. (Currently Amended) The ultraviolet fluorescence detector of claim 1, further comprising at least one power source providing power to said excitation light source, said sample receiving platform, said ultraviolet light detector and said ~~detection~~ analysis module.

17. (Original) The ultraviolet fluorescence detector of claim 1, wherein said excitation light source includes at least one of a tunable laser, a flash lamp, an ultraviolet LED and a solid state ultraviolet diode.

18. (Original) The ultraviolet fluorescence detector of claim 1, wherein said excitation light source includes a laser source of approximately 0.1 to approximately 250 millijoules.

19. (Original) The ultraviolet fluorescence detector of claim 1, wherein the excitation light source is a pulsed light source.

20. (Original) The ultraviolet fluorescence detector of claim 1, further comprising a controller that monitors said excitation light source for the purpose of detected substance spectrum stabilization.

21. (Original) The ultraviolet fluorescence detector of claim 1, wherein ultraviolet fluorescence detector detects ultraviolet signals between approximately 240 nanometers and approximately 540 nanometers.

22. (Original) The ultraviolet fluorescence detector of claim 1, further comprising a light minimizing enclosure.

23. (Original) The ultraviolet fluorescence detector of claim 22, wherein said light minimizing includes a reflective spherical surface.

24. (Original) The ultraviolet fluorescence detector of claim 1, further comprising a handheld scanner.

25. (Original) The ultraviolet fluorescence detector of claim 24, wherein said hand held scanner connect to said ultraviolet fluorescence detector via fiber optic materials.

26. (Original) The ultraviolet fluorescence detector of claim 1, wherein said ultraviolet fluorescence detector can detect ultraviolet emissions from a chemical compound.

27. (Original) The ultraviolet fluorescence detector of claim 23, wherein said chemical compound includes at least one of a drug, an explosive, a biological agent, a biochemical agent, a nuclear material, a narcotic material, a petroleum material and a waste material.

28. (Currently Amended) A method for detecting and analyzing chemical substances using ultraviolet fluorescence comprising the steps of:

directing an excitation light source to a target material;

receiving induced fluorescent energy from said target material; and

determining the nature of the target material based upon the received induced fluorescent energy~~.~~;

wherein the said step of directing includes directing excitation light through first optics that include at least one of an optical lens, a shutter, a filter, a mirror, a fiber optic coupler and an optical fiber; and

wherein the received induced fluorescent energy has passed through an optic having an F/2 mirror and is at least approximately 1.0 meters in diameter.

29. (Previously Cancelled).

30. (Cancelled).

31. (Currently Amended) The method of claim 28, wherein ~~the~~ said step of determining includes comparing parameter ranges for said received induced fluorescent energy with predetermined ultraviolet parameters and defining a match based on a predetermined

standard deviation between said received induced fluorescent energy and predetermined ultraviolet parameters.

32. (Previously Presented) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

an ultraviolet light detector for receiving induced fluorescent energy;

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and

an input optic for passing the induced fluorescent energy to said ultraviolet light detector wherein the input optic is an F/2 lens having a diameter over approximately 1.0 meters.

33. (Previously Presented) The ultraviolet fluorescence detector of claim 32, further comprising a second optic for receiving said induced fluorescent energy; wherein said second optic includes at least one of a mirror, a lens, a beam splitter, a shutter, a fiber optic fiber, a fiber optic coupler, a filter and an input slit.

34. (Previously Presented) The ultraviolet fluorescence detector of claim 33, wherein said filter is a filter wheel.

35. (Currently Amended) The ultraviolet fluorescence detector of claim 32, further comprising ~~An ultraviolet fluorescence detector comprising:~~

~~an excitation light source;~~

~~a sample receiving platform capable of receiving excitation light from said excitation light source;~~

~~an ultraviolet light detector for receiving induced fluorescent energy;~~

~~an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and~~

a CCD detector.

36. (Previously Presented) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

an ultraviolet light detector for receiving induced fluorescent energy;

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and

at least one power source providing power to said excitation light source, said sample receiving platform, said ultraviolet light detector and said analysis module

37. (Previously Presented) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

an ultraviolet light detector for receiving induced fluorescent energy;

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum;

wherein said excitation light source is a pulsed light source.

38. (Previously Presented) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

an ultraviolet light detector for receiving induced fluorescent energy;

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and

a controller that monitors said excitation light source for the purpose of detected substance spectrum stabilization.

39. (Currently Amended) The ultraviolet fluorescence detector of claim 36, further comprising ~~An ultraviolet fluorescence detector comprising:~~

~~an excitation light source;~~

~~a sample receiving platform capable of receiving excitation light from said excitation light source;~~

~~an ultraviolet light detector for receiving induced fluorescent energy;~~

~~an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and~~

a handheld scanner.

Please add the following claims:

40. (New) An ultraviolet fluorescence detector comprising:

an excitation light source;

a sample receiving platform capable of receiving excitation light from said excitation light source;

a first optics for directing said excitation light to said sample receiving platform;

an ultraviolet light detector for receiving induced fluorescent energy;

an analysis module for matching said induced fluorescent ultraviolet energy against a previously determined signature spectrum; and

at least one power source providing power to said excitation light source, said sample receiving platform, said ultraviolet light detector and said analysis module.

41. (New) The ultraviolet fluorescence detector of claim 40, wherein said excitation light source includes a laser source of approximately 0.1 to approximately 250 millijoules.

42. (New) The ultraviolet fluorescence detector of claim 40, wherein the excitation light source is a pulsed light source.

43. (New) The ultraviolet fluorescence detector of claim 40, further comprising a controller that monitors said excitation light source for the purpose of detected substance spectrum stabilization.

44. (New) The ultraviolet fluorescence detector of claim 40, further comprising a light minimizing enclosure.

45. (New) The ultraviolet fluorescence detector of claim 45, wherein said light minimizing includes a reflective spherical surface.